

FORM PTO-1390 (REV. 07-2005)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		EXPRESS MAIL NUMBER <b>EV 642 788 130 US</b>	ATTORNEY'S DOCKET NUMBER <b>187857/US-479686-00018</b>
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371				U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/585568</b> <small>To be assigned</small>	
INTERNATIONAL APPLICATION NO. <b>PCT/EP2005/000041</b>		INTERNATIONAL FILING DATE <b>January 5, 2005</b>		PRIORITY DATE CLAIMED <b>January 5, 2004</b>	
TITLE OF INVENTION <b>HIGH-FREQUENCY SPRAYING DEVICE</b>					
APPLICANT(S) FOR DO/EO/US <b>JÜRGEN KUNSTMANN, JÖRG RATHENOW and SOHEIL ASGARI</b>					
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other					
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been transmitted by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input checked="" type="checkbox"/> An English translation of the International Application as filed (35 U.S.C. 371(c)(2)). <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not transmitted by the International Bureau).</li> <li>b. <input type="checkbox"/> had been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input checked="" type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36</li> </ol>					
<b>Items 11 to 20. below concern document(s) or information included:</b>					
<ol style="list-style-type: none"> <li>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included</li> <li>13. <input checked="" type="checkbox"/> A preliminary amendment.</li> <li>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>15. <input checked="" type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 – 1.825</li> <li>18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4)</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> <li>20. <input checked="" type="checkbox"/> Other items or information: PTO-1449 form, International Publication No. WO 2005/065843, International Search Report, Written Opinion, English language translation of the PCT application, PCT Preliminary Examination Report, Redline comparison document, and Return Receipt Postcard</li> </ol>					

AP20 Rec'd PCT/PTO 05 JUL 2006

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR 1.5)		INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER	
10/585568		PCT/EP2005/000041		187857/US-479686-00018	
21. The following fees have been submitted:				CALCULATIONS	PTO USE ONLY
<input checked="" type="checkbox"/> a) Basic national fee (37 CFR 1.492(a)).....				\$ 300	
22. <input checked="" type="checkbox"/> Examination fee (37 CFR 492(c))					
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....				\$0.00	
All other situations.....				\$200.00	\$ 200
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b))					
If the written opinion of the ISA/US or US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....				\$0.00	
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority.....				\$100.00	
International Search Report prepared and provided to the Office .....				\$400.00	
All other situations .....				\$500.00	\$ 400
TOTAL OF 21, 22 and 23 =				\$ 900	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100	/50 =		x \$250.00		
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	21-20 =	1	x \$50.00	\$50	
Independent claims	1-3 =	0	x \$200.00	\$ 0	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360.00	\$	
TOTAL OF ABOVE CALCULATIONS =				\$950	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$	
SUBTOTAL =				\$950	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
TOTAL NATIONAL FEE =				\$ 950	
Fee for recording the enclose assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$	
TOTAL FEES ENCLOSED =				\$950	
				Amount to be refunded:	\$
				charged:	\$

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR 1.5) <div style="font-size: 2em; font-weight: bold; text-align: center;">10/585568</div> <div style="text-align: center; font-size: 0.8em;">To be assigned</div>	INTERNATIONAL APPLICATION NO. <div style="text-align: center; font-weight: bold;">PCT/EP2005/000041</div>	ATTORNEY'S DOCKET NUMBER <div style="text-align: center; font-weight: bold;">187857/US-479686-00018</div>
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a. ☒ A check in the amount \$950 to cover the above fees is enclosed.  
of

b. ☐ Please charge my Deposit Account No. 50-2054 in the amount of \$\_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to  
Deposit Account No. 50-2054 A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

**NOTE: Where an appropriate time limit under 37 CFR 1.494 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.**

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SEND ALL CORRESPONDENCE TO: **CUSTOMER NUMBER 30873**

Dorsey & Whitney LLP Intellectual Property Department 250 Park Avenue New York, New York 10177	<div style="border-bottom: 1px solid black; text-align: center; margin-bottom: 5px;"> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 5px;">           Signature  <b>Steven P. Marsh, Esq.</b> </td> <td style="width: 40%; padding: 5px;">           Date <b>July 5, 2006</b> </td> </tr> <tr> <td colspan="2" style="padding: 5px;">           Name  <b>53,271</b> </td> </tr> <tr> <td colspan="2" style="padding: 5px;">           Registration Number         </td> </tr> </table>	Signature <b>Steven P. Marsh, Esq.</b>	Date <b>July 5, 2006</b>	Name <b>53,271</b>		Registration Number	
Signature <b>Steven P. Marsh, Esq.</b>	Date <b>July 5, 2006</b>						
Name <b>53,271</b>							
Registration Number							

10/585568

■ MAIWALD PATENTANWALTS GMBH ■

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PCT/EP2005/000041  
WO 2005/065843  
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25. Oktober 2005

### Neue Ansprüche

1. Hochfrequenzzerstäubungsvorrichtung zum Zerstäuben einer Beschichtungsflüssigkeit und zum anschließenden Beschichten eines Substrats (14), mit

- einer zu hochfrequenten Schwingungen anregbaren Zerstäubungseinheit (1), die die ihr zugeführte Beschichtungsflüssigkeit zu einem Sprühnebel zerstäubt,
- einem positionierbaren Substrathalter (8, 9), der das zu beschichtende Substrat (14) ständig in einer für die Beschichtung günstigen Position innerhalb des Sprühnebels hält, wodurch das Substrat (14) mit dem Sprühnebel benetzt wird, und
- mindestens einer Trocknungsvorrichtung (6), die die so auf dem Substrat (14) gebildete Sprühnebelschicht trocknet;

wobei die Zerstäubungseinheit (1) einen brumpfenförmigen Resonanzkörper (2) aufweist und wobei die Zerstäubungseinheit (1) von einem einseitig geöffneten Gehäuse (16) umhaust ist, wobei der Resonanzkörper (2) im Bereich der Öffnung des Gehäuses angeordnet ist;

wobei das Gehäuse (16) eine steuerbare Luft- oder Gaszufuhr (31) aufweist;

wobei die Luft- oder Gaszufuhr (31) als Inertgaszufuhr (31) ausgebildet ist, zur Zuführung von Inertgas zu dem Gehäuse;

wobei die eine Öffnung des Gehäuses (16) eine Inertgasdüse (3) aufweist, durch die das über die Inertgaszufuhr (31) bereitgestellte Inertgas als Trägermedium zur Sprühstrahlkonditionierung des Sprühnebels entströmt.

2. Vorrichtung gemäß Anspruch 1,  
dadurch gekennzeichnet, dass die Zerstäubungseinheit (1) relativ zum Substrat (14) bewegbar ist.

NH:bm

10/585568

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München · Hamburg · Düsseldorf  
New York

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Aktenzeichen

PCT/EP2005/000041

WO 2005/065843

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Unser Zeichen

B 7747 / NH

München,

19. Dezember 2005

Bezugnehmend auf das Telefonat vom 16. Dezember 2005 mit dem zuständigen Prüfer wird anbei zum Satz neuer Ansprüche vom 25. Oktober 2005 eine Austauschseite 1 eingereicht, in welcher im Anspruch 1 das Merkmal des "trompetenförmigen" Resonanzkörpers aus dem ursprünglichen Anspruch 9 aufgenommen wurde. Es wird diesseitig davon ausgegangen, dass nunmehr alle Beanstandungen aus dem schriftlichen Vorbescheid überwunden wurden. Es wird daher um Ausstellung eines entsprechend positiven internationalen vorläufigen Prüfungsbescheides gebeten.

  
Maiwald Patentanwalts GmbH  
(Norbert Hansen)

Anlagen

Geänderter Anspruch 1

NH:bm

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